Department of Planning and Natural Resources Division of Environmental Protection Public Water System Supervision Program

End-of-Year Report for Fiscal Year 2012 October 1, 2011 to September 30, 2012



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SECTION 1: INTRODUCTION



The Department of Planning and Natural Resources (DPNR) is tasked with ensuring that the quality of public water supplies throughout the United States Virgin Islands (USVI) is safe for human consumption. DPNR's Division of Environmental Protection (DEP), Public Water System Supervision (PWSS) program must assure that all public water systems, bottled water plants and ice manufacturers comply with Title 19, Part VI, Chapter 51, Subchapter 1303 of the Virgin Islands Rules and Regulations (V.I.R. & R.). Authority for enforcement of the

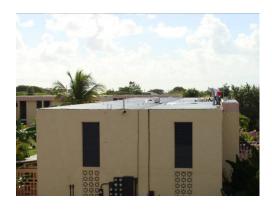
Safe Drinking Water Rules and Regulations is given to the Commissioner of DPNR by Title 19, Part VI, Chapter 51, Subchapter 1309.

USVI law defines a public water system as a system that provides water via piping or other constructed conveyances for human consumption to at least 8 service connections, or serves an average of at least 20 people for at least 60 days each year. Public water systems are classified as a Community Public Water System, Non-Transient, Non-Community Public Water System or Transient, Non-Community Public Water System.



The primary and largest source of public water supply in the USVI is provided by desalinization and reverse osmosis plants (saltwater conversion), operated by the Virgin Islands Water and Power Authority (WAPA). Other major public water sources include roof catchment/cistern systems and groundwater wells. The use of reverse osmosis treatment units to produce potable water from brackish wells or seawater is increasing throughout the Territory.

Most of the Territory's three hundred and ten (310) public water systems are small systems serving populations less than five hundred. The majority of these systems utilize a roof catchment/cistern system. This type of water system collects rain water on a roof surface and directs it to a cistern by means of gutters and down spouts. A high pressure pump pulls the water from the cistern and distributes it to the users via copper and/or PVC pipes.







Additionally, cistern water supplies are often supplemented with water trucked in from DPNR approved sources. DPNR is responsible for regulating the trucks and tankers used for the hauling of water for human consumption. Water transporters are regulated under Title 19, Part VI, Chapter 51, Subchapter 1303, Section 1303-17 of the V.I.R. & R. All sources for water haulers must be approved by DPNR.

SECTION 2: PUBLIC WATER SYSTEM SUPERVISION PROGRAM GOALS

The main objective of the PWSS program is to protect public health by ensuring that the quality of water provided to the public is safe for human consumption. Achieving and maintaining a high level of strict compliance with all of the requirements of the Safe Drinking Water Act (SDWA) is the most prominent means of achieving this goal.

SECTION 3: PUBLIC WATER SYSTEM SUPERVISION PROGRAM ACTIVITIES

Data Management

The PWSS program currently utilizes the SDWIS/State version 3.0 to maintain the Territories inventory of public water systems and for reporting violations and enforcement actions to EPA Region II. In addition to SDWIS/State, the program also utilizes Excel Spreadsheets as a working tool for keeping track of water quality data. The PWSS Program continually updates the Public Water System Inventory to ensure total regulatory coverage of all public water systems in the Virgin Islands.

Surveillance & Technical Assistance

- Perform Sanitary Surveys of Public Water Systems
- Conduct annual registration and inspection of tankers that haul water for human consumption
- Provide technical assistance to water purveyors and investigate water quality complaints by the public.
- Surveillance samples are collected in response to water quality complaints and during sanitary surveys of new public water systems, WAPA, and/or existing systems having trouble staying in compliance with drinking water standards. Samples are analyzed by a DPNR certified lab for microbiological contamination.



Maximum Contaminant Levels & Treatment Techniques

Public Water Systems are required to monitor their water supply for various contaminants and report the results to DPNR/DEP. The SDWA establishes limits at which a contaminant may be present in a

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water supply. These established limits or "Maximum Contaminant Levels (MCL)", help to ensure that public water supplies are safe for human consumption. For some regulations, treatment techniques are established in place of an MCL to control unacceptable levels of a contaminant in water. The PWSS program reviews the analytical results of water quality data to determine compliance with these levels.

Public Notification

Public water systems are required to notify persons served when it fails to comply with the requirements of the SDWA or, when facing other situations posing a risk to public health. Community Public Water Systems are required to prepare and deliver a written annual Consumer Confidence Report (CCR) to their customers. These reports provide valuable information on the system's water quality, and allow the users to make personal health-based decisions regarding their drinking water consumption.

Enforcement

Notices of Violation (NOVs), Administrative Orders, and civil penalties are issued to public water systems that do not comply with the monitoring requirements of the Safe Drinking Water Act and/or fail to notify the public of these violations.

SECTION 4: FISCAL YEAR 2012 WORK PLAN END-OF-YEAR ACCOMPLISHMENTS

The following activities were accomplished during Fiscal Year (FY) 2012 in accordance with the Public Water System Supervision (PWSS) program's FY2012 Work Plan.

I-A PROGRAM MANAGEMENT AND ADMINISTRATION:

- I-A1 No revisions were made to the PWSS program's approved budgets for fiscal years 2012 and 2013. The FY2012 & FY2013 Work Plans, however, were revised to reflect a 20% decrease in activities. This was primarily accomplished by reducing the number of sanitary survey inspections from 118 to 94.
- I-A2 The End-of-Year Report for fiscal year 2011 was prepared and transmitted to the Caribbean Environmental Protection Division (CEPD) and the U. S. Environmental Protection Agency (EPA) Region II on January 20, 2012.
- I-A4 Monthly reports for October, 2011 through September, 2012 on program activities were prepared and transmitted to administrative staff of the Division of Environmental Protection at the end of each month.
- I-A5 The Safe Drinking Water Emergency Operation Plan (EOP) for provision of safe drinking water under emergency conditions was revised by updating inventory information on water providers in July, 2012.
- I-A5 The PWSS Quality Assurance Project Plan (QAPP) and related Standard Operating Procedures (SOP) were reviewed. No updates or revisions were required.

II-A SURVEILLANCE & TECHNICAL ASSISTANCE:

- Nine-four (94) Sanitary Surveys were conducted during the reporting period. (See table 1). This represents over 100% of the sanitary survey commitment for the revised FY12 Work Plan.
- II-A1 **Thirty-three** (33) sanitary surveys of Community Public Water Systems were conducted during the reporting period. (*See table 1*).







II-A2 **Twenty** (20) sanitary surveys of Non-Transient, Non-Community Public Water Systems were conducted during the reporting period. (*See table 1*).









II-A3 **Twenty** (20) sanitary surveys of Transient, Non-Community Public Water Systems were conducted during the reporting period. (*See table 1*).







II-A4 **Twenty-one** (21) sanitary surveys of non public water systems (bottled water plants/water vending machines/ ice manufacturers) were conducted during the reporting period. (See table 1).







II-A5 A list of public water systems (PWS) scheduled to receive a sanitary survey during FY2012 was developed. The target number of inspections for FY2012 was initially 118. This number was reduced by 20%, thus establishing a new target of 94 inspections: 38 Community PWS; 20 Non-Transient, Non-Community PWS; 20 Transient, Non-Community PWS; 16 Bottled water plants/water vending machines/ice manufacturers.

II-A6 **Eighty-eight (88)** Water hauler tanks/trucks were inspected during the reporting period. (See table 2)







- II-A7 During the reporting period there were several water quality complaints from home owners throughout the territory about the brown/red color of their water supply from the Water & Power Authority (WAPA). This "red water" situation is a result of the continued deterioration of ductile and cast iron waterlines. WAPA addresses this situation on a needed basis by implementing distribution line flushing in the affected areas.
- II-A8 The analytical results of all water quality monitoring performed by public water systems, bottled water companies, water vending machines and ice manufactures, submitted to the PWSS program were reviewed to determine compliance with the Safe Drinking Water Act (SDWA), entered into respective spreadsheets and filed appropriately. Upon the determination of violations of drinking water standards, Notices of Violations with or without penalty are drafted and submitted to legal counsel for processing to be served.
- II-A9 Sanitary surveys were performed at three (3) new PWS. During the inspections it was determined that their design will enable them to comply with the SDWA. (See table 1).
- II-A10 In accordance to the PWSS surveillance monitoring program, samples are collected as following:
 - 1) In response to water quality complaints
 - 2) During sanitary surveys of new public water systems
 - 3) During sanitary surveys of the Water & Power Authority's water systems
 - 4) Existing systems having trouble staying in compliance with drinking water standards
 - 5) Water sources for water haulers during each water hauler inspection

Fifty-nine (59) surveillance samples were collected. (See table 3)





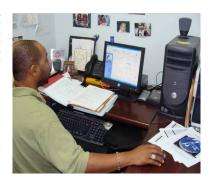


II-A11 On **one hundred and fifty-four** (**154**) occasions during the reporting period technical assistance were provided to over one hundred (100) Public Water Systems during the reporting period. (*See table 4*)

During the months of December 2011 through March, 2012 a special investigation of the occurrence of legionella bacteria at the Frenchman's Cove Condominium was conducted. Several conference calls on the issue were held with EPA Region 2, Department of Health, Department of Labor, Attorney General's Office and the Office of the Governor. Chlorine residual monitoring was performed at the facility to ensure that adequate treatment technology has been implemented for the control of legionella.

II-B DATA MANAGEMENT:

- II-B1 On a monthly basis revised inventory information reflecting changes to public water systems (PWS) determined during sanitary surveys were updated in the VI Safe Drinking Water Information System (SDWIS)/State database. Updates include but are not limited to:
 - 1) General information (i.e. ownership, population served, manager, etc.)
 - 2) Type of PWS (community, non-transient non-community, transient non-community & non-public)
 - 3) PWS status (active or inactive)



By the end of the reporting period the inventory was updated to reflect a total of **316** public water systems (PWS) and **46** non-public water systems (NP) (bottled water plants, water vending machines, & ice manufactures). The total number of regulated systems in the US Virgin Islands was **362**

Summary of active Public Water Systems

Island	CPWS	NTNCPWS	TNCPWS	Subtotal	NP	Total
St. John	2	11	12	25	3	28
St. Thomas	42	56	51	149	17	166
St. Croix	35	58	49	142	26	168
Total	79	125	112	316	46	362

- II-B2 Quarterly updates of the inventory of the territory's PWSs were provided to EPA via CDX on 11/15/11, 02/15/12, 05/15/12, and 08/15/12.
- II-B4 PWS inventory information, water quality data and sanitary survey information are maintained in the territory's SDWIS/State database.
- II-B5 Violations and enforcement actions are maintained in SDWIS/State. Quarterly updates of Violations and enforcement actions were provided to EPA via CDX on 11/15/11, 02/15/12, 05/15/12, and 08/15/12.

II-B6 90th% Lead & Copper levels were entered into SDWIS/State.

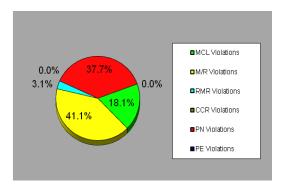
II-B7 On a monthly basis, sanitary survey information was updated on the PWS Inventory. Updates are reported to EPA during the quarterly reports.

II-C ENFORCEMENT ACTIONS:

Enforcement actions are taken against public water systems that violate the Safe Drinking Water Act by issuing Notices of Violation (NOV), Administrative Orders (AO), Letters of Non-compliance (LNC) and/or Civil Penalties (CP).

Violations occur when a PWS 1) exceeds the maximum contaminant level (MCL) for a contaminant; 2) fails to monitor or report analytical results (M/R); 3) fails to perform repeat monitoring when required (RMR); 4) fails to submit a Consumer Confidence Report (CCR); 5) fails to notify the public of a violation (PN); and 6) fails to perform the required public education (PE) when the lead action level is exceeded.

II-C1 A total of **three hundred and fifty-three** (353) violations were determined during the reporting period. Approximately 37.7% of these violations occurred because many systems failed to perform the required public notification. The chart and table below summarizes the violations that occurred during FY12. (*Table 5* of the Appendixes of Tables identifies these violations)



Summary of FY12 Violations

Contaminant or Requirement	Violation Type	# of Violations
	MCL	62
Coliform	RMR	11
	M/R	52
Load & Copper	M/R	0
Lead & Copper	PE	0
Nitrate	MCL	2
Nitrate	M/R	27
Disinfection Dymas duets	MCL	0
Disinfection Byproducts	M/R	66
Public Notification PN		133
Total Violations Determined	353	

One hundred and ninety-one (191) enforcement actions were taken during the reporting period. These actions addressed a total of **two hundred and ninety-five (295)** violations. The table below summarizes the enforcement actions taken during FY12. (*Table 6* of the Appendixes of Tables identifies these actions)

Summary of FY12 Enforcement Actions

Requirement	# of Enforcement Actions(EA)	# of Violations Addressed by EA	Type of Action
Coliform	125	<mark>229*</mark>	NOV/AO
Nitrate/Nitrite	0	0	
Disinfection Byproducts	66	66	NOV/AO
FY12 Enforcement Actions	191	295	

*Includes 104 Public Notification violations addressed with a TCR violation in a single NOV/AO

- II-C3 The 2011 Annual Public Water System report was not completed during the reporting period. This report will be completed and submitted to EPA Region II by February 28, 2012. This report summarizes the Territory's public water systems compliance with the Safe Drinking Water Act (SDWA) during calendar year 2011. Importantly, the report highlights significant non-compliers with the requirements of the SDWA.
- II-C4 **Seven** (7) PWSs were determined to be in Significant Non-compliance with the Total Coliform Rule (TCR). These systems were issued standard Notices of Violations requiring compliance with the public notification requirements and a return to compliance with the TCR monitoring requirements.

No.	PWS Name	EPA ID#	Contaminant	No. of Violations
1	Carambola Beach Resort & Spa	VI3000026	Coliform	3
2	Chenay Bay	VI3000091	Coliform	4
3	Cruz Bay Head Start	VI0000562	Coliform	3
4	Food Center	VI1000309	Coliform	3
5	Old Stone Farmhouse	VI1000149	Coliform	3
6	Romano's Restaurant	VI1000148	Coliform	11
7	Villa La Reine Shopping Center	VI0000413	Coliform	5

II-D PUBLIC NOTIFICATION (PN) RULE:

II-D1 Public Notifications (PN) must be issued to the consumers of a water system any time the system violates national primary drinking water regulations or has other situations posing a risk to public health. The PWSS program reviews each notice to determine compliance with the PN Rule. Technical assistance on the contents of a PN is provided to water systems.

A total of **one hundred and thirty-three** (133) PN violations were determined during the reporting period. Notices of Violation were issued for one hundred and four (104) of these violations.

Summary of PN Violations

Contaminant or Requirement	# of PN Violations
Coliform	104
Lead & Copper	0
Nitrate	29
Disinfection Byproducts	0
Total PN Violations Determined in FY12	133

Sixty-four (64) Public Notices were reviewed and approved during the reporting period for the following violations:

No.	PWS Name	EPA ID#	Contaminant	Violation Type	Violation Period	District
1	Wilhelm George Head Starts I & II	VI1000315	Coliform	MCL	10/04/11	St. Thomas
2	Lovenlund Apartments	VI1000304	Coliform	MCL	10/17/11	St. Thomas
3	Tutu Park Mall	VI1000284	Coliform	MCL	10/11/11	St. Thomas
4	Carden Beach Condominium	VI3000536	Coliform	MCL	10/18/11	St. Croix
5	VI Rum-Pavilion	VI0000415	Coliform	MCL	10/11/11	St. Croix
6	Gentle Winds A-B	VI0000055	Coliform	MCL	09/12/11	St. Croix
7	Gentle Winds D-E	VI3000056	Coliform	MCL	09/12/11	St. Croix
8	St. Mary's School	VI0000403	Coliform	MCL	10/19/11	St. Croix
9	Gentle Winds I	VI3000052	Coliform	MCL	10/21/11	St. Croix
10	Gentle Winds J	VI3000053	Coliform	MCL	10/21/11	St. Croix
11	Gentle Winds K	VI3000054	Coliform	MCL	10/21/11	St. Croix
12	VITELCO (Warehouse)	VI1000283	Coliform	MCL	06/21/11	St. Thomas
13	Green Cay Marina	VI3000088	Coliform	MCL	12/12/11	St. Croix
14	Caneel Bay & Turtle Resort	VI0000558	Coliform	MCL	07/05/11	St. Thomas
15	Sweet Lime Village	VI3000524	Coliform	MCL	01/13/12	St. Croix
16	Clearview Apartments	VI1000052	Coliform	MCL	01/18/12	St. Thomas
17	Rhythms at Rainbow Beach	VI0000431	Coliform	M/R	Dec-11 & Jan-12	St. Croix
18	Wilhelm George Head Start	VI1000315	Coliform	MCL	10/04/11	St. Thomas
19	VITELCO (Warehouse)	VI1000283	Coliform	MCL	10/04/11	St. Thomas
20	Bunker Hill Guest House	VI1000108	Coliform	MCL	12/19/11	St. Thomas
21	Guy Benjamin Elementary-STJ	VI0000555	Coliform	MR	Oct-11	St. John
22	R. Wheatley Skills Center	VI1000069	Coliform	MR	Oct-11	St. Thomas
23	Guy Benjamin Elementary-STJ	VI0000555	Coliform	MR	Nov-11	St. John
24	R. Wheatley Skills Center	VI1000069	Coliform	MR	Nov-11	St. Thomas
25	Edith L. Williams School	VI0000200	Coliform	MR	Nov-11	St. Thomas
26	James Monroe (Sibilly)	VI0000524	Coliform	MR	Nov-11	St. Thomas
27	Yvonne Bowski Elementary	VI0000267	Coliform	MR	Nov-11	St. Thomas
28	Hebert Grigg Home (Kitchen)	VI0000058	Coliform	MCL	11/14/11	St. Croix
29	Heritage Hills Condos	VI1000118	Coliform	MR	Mar-12	St. Thomas
30	The Village Mall	VI0000058	DBP	MR	2005-2011	St. Croix
31	St. Joseph High School	VI0000555	Coliform	MCL	4/20/12	St. Croix
32	Seventh Day Adventist-St. Croix	VI3000115	DBP	M/R	2005-2011	St. Croix
33	Bates Water Delivery	VI3000537	Coliform	MCL	04/16/12	St. Croix
34	Joseph Sibilly Elem (Art Room)	VI0000508	Coliform	MR	Nov-11	St. Thomas
35	Pavilions & Pools	VI1000021	Coliform	MCL	11/08/11	St. Thomas
36	Lovenlund Apartments	VI1000304	DBP	M/R	2011	St. Thomas
37	Pelican Cove American	VI3000071	Coliform	MCL	02/06/12	St. Croix

No.	PWS Name	EPA ID#	Contaminant	Violation Type	Violation Period	District
38	Tutu Park Mall	VI1000284	Coliform	MCL	05/15/12	St. Thomas
39	Good Hope School	VI0000340	DBP	M/R	2005-2009 & 2011	St. Croix
40	Herbert Grigg Home (IC)	VI3000477	DBP	M/R	2011	St. Croix
41	Herbert Grigg Home (LTC)	VI3000025	DBP	M/R	2011	St. Croix
42	Sugar Bay Plantation	VI1000104	DBP	M/R	2010 & 2011	St. Thomas
43	Sugar Bay Plantation	VI1000104	PB/CU	M/R	2011	St. Thomas
44	VIPA Cyril E. King Airport	VI0000264	Coliform	MCL	08/16/11	St. Thomas
45	Al Cohen's Plaza B-2 (Randy's)	VI1000161	Coliform	MR	Mar-11	St. Thomas
46	American Yacht Harbor	VI1000042	DBP	M/R	2007, 2008, 2010 & 2011	St. Thomas
47	Carambola Beach Resort	VI3000026	DBP	M/R	2011	St. Croix
48	Fast Foto Inc. #1 (Vitraco Mall)	VI3000334	DBP	M/R	2005-2011	St. Croix
49	Windward Passage Hotel	VI0000177	DBP	M/R	2007-2011	St. Thomas
50		1 D 1 D 1 VIII VIII VIII VIII VIII VIII	M/R	2007-2011	St. Thomas	
51		V10000535	Pb/Cu	M/R	2009-2011	St. Thomas
52	Lovenlund Apartments	VI1000304	Pb/Cu	M/R	2009 & 2011	St. Thomas
53	Estate Concordia Campground	VI1000320	Coliform	MCL	05/23/12	St. John
54	Ritz Carlton	VI1000105	DBP	M/R	2005, 2007- 2009, & 2011	St. Thomas
55			Pb/Cu	M/R	2008-2011	
56			Coliform	M/R	Apr-12	St. Thomas
57	Plantation Manor Poinsettia	VI0000237	DBP	M/R	Quarterly 2010-2012	
58	Frenchman's Reef Resort	VI0000095	DBP	M/R	2005, 2006, 2008, 2009, 2011	St. Thomas
59			Pb/Cu	M/R	2008-2011	
60	VING Sprat Hall Facility	VI3000542	Coliform	MCL	07/12/12	St. Croix
61	Sapphire Beach Resort	VI1000029	DBP	M/R	2005-2011	St. Thomas
62	VING Sprat Hall Facility	VI3000542	Coliform	MCL	08/06/12	St. Croix
63	Bluebeards Beach Club & Villas	VI0000218	DBPs	M/R	2008 & 2009	St. Thomas
64	NPS Cinnamon Bay Campground	VI0000557	DBPs	M/R	2009	St. Thomas

II-D1 **One hundred and four (104)** Notices of Violations were issued to **sixty-six (66)** PWSs for failing to perform the required public notification for TCR violations. The Administrative Orders (AO) issued to PWSs with DBPs violations did not site non-compliance with the PN Rule. These AO's however required compliance with the PN Rule for systems that did not provide DPNR and EPA with DBPs monitoring data since January 1, 2009.

II- E TOTAL COLIFORM RULE (TCR):

II-E1 The analytical results submitted to DPNR for Total Coliform samples were reviewed to determine compliance with the TCR Rule. There were a total of **one hundred and twenty-five** (125) violations of the Total Coliform Rule during the reporting period. Eighty-three (83) public water systems were responsible for these violations (*See Table 7*). Enforcement actions were taken for one hundred and twenty-two (122) of the TCR Violations during the reporting period. Enforcement actions on the remaining three violations will occur during FY13.

TCR Violations Determined

Violation Type	No. of Violations
MCL	62
RMR	11
M/R	52
Total	125

Eighty-three (83) public water systems were responsible for the one hundred and twenty-five (125) violations of the Total Coliform monitoring requirements during FY12. (See table 7)

II- F LEAD AND COPPER RULE:

II-F1 Lead and Copper 90th% levels were calculated for all monitoring data submitted during the reporting period. Data is entered into the Lead & Copper Spreadsheet and the SDWIS/State database. The 90th% data was submitted to EPA via the 12/14/11 CDX report.

II-F2 No Activity

- II-F3 No desk top studies were submitted for review.
- II-F4 No enforcement actions were taken during the reporting period. LCR violations & enforcement actions are expected to take place during the 3rd quarter of FY2013.
- II-F5 During the reporting period no enforcement actions were taken. LCR violations & enforcement actions are expected to take place during the 2nd quarter of FY2013

II- G PHASE CHEMICAL RULE:

- II-G1 All IOC, VOC, and SOC data submitted to the PWSS program were reviewed to determine compliance with the respective drinking water standards. There were no violations of drinking water standards for these contaminant groups during the reporting period.
- II-G2 Nitrate and Nitrite analytical results were reviewed for compliance with the monitoring requirements for Nitrate/Nitrite and entered into a compliance spreadsheet. Twenty-nine public water systems were responsible for **Twenty-nine** (29) violations of the **Nitrate/Nitrite monitoring requirements** during the reporting period (*See table 8*). For each of these violations the systems also failed to perform the required public notification.

Summary of Nitrate/Nitrite Violations

Contaminant	Violation Type	# of Violations
Nitrate	MCL	2
Nitrate	M/R	27
Nitrite	M/R	0
Nitrite	MCL	0
Tota	29	

II-G3 No waivers for IOC, VOC, and SOC were granted during the reporting period.

II-H STAGE 1 DISINFECTANTS AND DISINFECTION BYPRODUCTS RULE

The analytical results for Stage 1 D/DBP monitoring submitted to DPNR were reviewed to determine compliance with the Stage 1 D/DBP Rule.

- II-H1 No new CPWS & NTNCPWS were notified of the requirements of the Stage 1 DBPR.
- II-H2 Technical assistance on the requirements of the Stage 1 DBPR was NOT needed during the reporting period.
- II-H3 **Sixty-six** (66) NOV/AOs were issued for violations of the Stage 1 DBPR during the reporting period.
- II-H4 During the reporting period it was determined that **sixty-six** (66) PWS were responsible for sixty-six (66) violations of the Stage 1 DBPR during the reporting period (*See table 9*).

II-I STAGE 2 DISINFECTANTS AND DISINFECTION BYPRODUCTS RULE

The Stage 2 Disinfectants and Disinfection Byproducts Rule (Stage 2 DBPR) requires some systems to complete an Initial Distribution System Evaluation (IDSE) to characterize Disinfection Byproducts (DBP) levels in their distribution systems and identify locations to monitor DBPs for Stage 2 DBPR compliance.

<u>Only</u> community water systems (CWS) and non-transient non-community water systems (NTNCWS) that either add a primary or residual disinfectant other than ultraviolet (UV) light, or deliver water that has been treated with a primary or residual disinfectant other than UV light must comply with the Stage 2 DBPR. The Rule establishes categories, based on population served, for each of these systems. The category a system belongs to determines how and when that system must comply with the IDSE requirements of the Stage 2 DBPR. USVI systems are either schedule 3 or schedule 4 systems.

Schedule 3 systems include CWS and NTNCWS serving 10,000 to 49,999 people or CWS and NTNCWSs that are part of a combined distribution system in which the largest system serves 10,000 to 49,999 people. However, if the NTNCWS serves fewer than 10,000 people, it **DOES NOT** have to comply with the IDSE requirements.

Schedule 4 systems include CWS and NTNCWS serving fewer than 10,000 people and not belonging to a combined distribution system in which any system serves less than 10,000 people. NTNCWS serving fewer than 10,000 people **DO NOT** have to comply with the IDSE requirements.

Monitoring waivers are granted 1) to systems serving fewer than 500 (Very Small System (VSS) Waiver) if certain conditions are meet and 2) to systems that satisfy the 40/30 Certification requirements.

Systems that do not receive a VSS or 40/30 Certification waiver must begin the collection of samples in accordance with their approved Standard Monitoring Plan (SMP) as follows:

Type of PWS	Population	Monitoring Schedule	Monitoring Frequency
Schedule 3	< 500	Begin sample collection: 10/1/08	annually
Schedule 3	>500	Begin sample collection: 10/1/08	quarterly
Schedule 4	< 500	Begin sample collection: 04/1/09	annually
Schedule 4	>500	Begin sample collection: 04/1/09	quarterly

WAPA-St. Thomas is the only Schedule 3 system required to submit a SMP and conduct standard monitoring. During the reporting period WAPA-St. Thomas submitted its revised Standard Monitoring Plan (SMP) for IDSE monitoring. DPNR has reviewed the revised SMP and recommended that EPA approve the plan. EPA has approved WAPA-St. Thomas' plan.

WAPA-St. Thomas is required to conduct standard monitoring as a Schedule 3 system serving a population of 10,000 to 49,000. WAPA-St. Thomas performed four quarters of IDSE monitoring. The monitoring data was reviewed and found to be in compliance with the regulation.

WAPA St. Thomas Stage 2 DBPR Monitoring

Sampling Round	Date
1 st Quarter	10/21/08
2 nd Quarter	01/20/09
3 rd Quarter	04/21/09
4 th Quarter	07/21/09

II-J RADIONUCLIDES RULE

- II-J1 The Territory's Community Public Water Systems are all in compliance the requirements of the Radionuclide Rule.
- II-J2 The analytical results submitted to DPNR for Radionuclide samples were reviewed to determine compliance with the Radionuclide Rule, entered into a spreadsheet and filed. There were no violations of the Radionuclide Rule during the reporting period.

II-K ARSENIC RULE:

- II-K1 The analytical results for Arsenic monitoring submitted to DPNR were reviewed to determine compliance with the Arsenic Rule, entered into a spreadsheet and filed. There were no violations of the revised Arsenic MCL during the reporting period.
- II-K2 Systems utilizing seawater as source are required to monitor their source water (seawater) and finished water for arsenic each calendar year.
- II-K3 Systems utilizing groundwater and/or rainwater as a source were required to sample each entry point to the distribution system for arsenic once every three years. Samples must be collected in the third year of each three year compliance period (2007, 2010, 2013, etc.).

II-L GROUNDWATER RULE

II-L1 *No Activity*

II-L2 No Activity

II-N CONSUMER CONFIDENCE REPORT (CCR) RULE

The Consumer Confidence Report (CCR) Rule requires that by July 1 of each year, Community Public Water Systems (CPWS) prepare and distribute a brief annual water quality report summarizing information regarding their water source, any detected contaminants, compliance, and educational information. Seventy-seven (77) CPWS were required to submit a Consumer Confidence Report by July 1, 2011. All the CPWs submitted their CCR.

II-N1 Technical Assistance on the preparation of CCRs was provided to **thirty-five** (35) CPWS during the reporting period. (*See Table 4*)

The adequacy, availability & content of each submitted CCR were reviewed. Enforcement actions can be taken for the failure to submit a report by July 1, 2011 or for the failure of the CPWS to deliver a report that is adequate, true in content and easily available to the systems consumers.

II-O LABORATORY CERTIFICATION AND CAPABILITY:

• Coliform samples collected by public water systems for compliance with the Safe Drinking Water Act must be analyzed by a certified laboratory to ensure that the results generated are reliable. DPNR-DEP's Quality Assurance Officer serves as the Certifying Authority for drinking water laboratories in the Territory. These labs are evaluated biennially. The certification procedures involve an onsite assessment of laboratory personnel, facility, equipment, procedures, analytical methods, Quality Assurance, Quality Control, safety and reporting. Table 10 provides current certification status.

- Proficiency Testing (PT) is required for each analyst performing analysis for compliance with the Total Coliform Rule. PT is performed annually. A table of (PT) results for each drinking water laboratory is maintained. (See table 11)
- On October 3, 2011 the Drinking Water Sampler Certification Examination was administered to **one** (1) individual in the St. Croix district. This candidate for certification passed the examination and is therefore qualified to collect drinking samples for compliance purposes.

II. P. CAPACITY DEVELOPMENT:

II-P1 No Activity

II-P2 No Activity

II.Q. OPERATOR CERTIFICATION:

II-Q1 *No Activity*

II-Q2 The Environmental Protection Agency (EPA) awarded the US Virgin Islands an operator certification expense reimbursement grant (ERG) in the amount of \$620,000 to provide training and certification for persons operating the Territory's community and non-transient, non-community public water systems serving 3,300 persons or fewer. Specifically, these funds are to be used to establish a training course for operators of public water systems in the US Virgin Islands. Grant funds will also be used to offset time and activity for drinking water program personnel, pay for training, printing, travel, contracts, supplies, equipment, etc., needed to implement the proposed work plan activities and meet indirect cost charges.

During the reporting period the draft professional service contract for the implementation of an operator certification training course for the Territory's small and medium sized public water systems was finalized. The contract was signed by Rural Community Assistance Corporation (RCAC) and the commissioner of DPNR. As of the end of the reporting period the contract is being processed by the department of Property & Procurement for final execution.

III. TRAINING:

- III-1 New staff member(s) were NOT added to the PWSS program during the reporting period. Therefore sanitary survey training was not needed in FY11.
- III-2 No PWSS staff attended training or workshops during FY11

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SECTION 5: APPENDIX OF TABLES